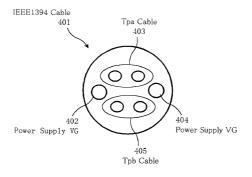
Fig. 1



500_ TPA Drive Block Tp Bias 511 - 501 Fig. 2 513 -O TPA Prior Art Strb_TX 55 Ω Strb_Enable Data_RX 503~ Receiver 514 Arb_a_RX Other Port Comparator 505~ 507-Speed_RX - Tp Bias 535 $520_{\rm L}{\rm TPB}$ Drive Block $5K\Omega = 5\%$ Speed_TX 536 - TPB Data_TX Driver Data_Enable Strb_RX 523-Receiver -O 537 Arb_b_RX 524-Comparator 525 ~ Port_States -0. 8V

526-

Fig. 3

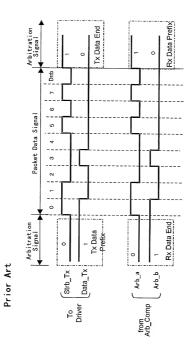
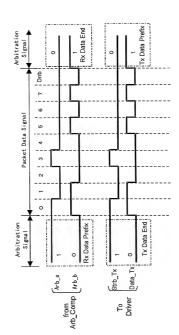


Fig. 4 Prior Art

	arbitration transmit		
	Arb_a_TX	Arb_b_TX	Line state name
	Z	z	IDLE
	Z	0	TX_REQUEST
			TX_GRANT
	00	z	TX_PARENT_NOTIFY
	0	11	TX_DATA_PREFIX
	1	Z	TX_CHILD_NOTIFY
			TX_IDENT_DONE
	1	0	TX_DATA_END
	11	1	BUS_RESET
Fig.	. 5	Prior Art	
	arbitration Receive		
	Arb_a_RX	Arb_b_RX	Line state name
	z	Z	IDLE
- 1	7		DY DADENT NOTICE

arbitration Receive			
Arb_a_RX	Arb_b_RX	Line state name	
Z	Z	IDLE	
z	0	RX_PARENT_NOTIFY	
		RX_REQUEST_CANCEL	
Z	1	RX_IDENT_DONE	
0	z	RX_SELF_ID_GRANT	
		RX_REQUEST	
0	0	RX_ROOT_CONTENTION	
		RX_REQUEST	
0	1	RX_PARENT_HANDSHAKE	
		RX_DATA_END	
1	Z	RX_CHILD_HANDSHAKE	
1	0	RX_DATA_PREFIX	
1	1	BUS_RESET	

- i g .



ig. 7 Prior Art

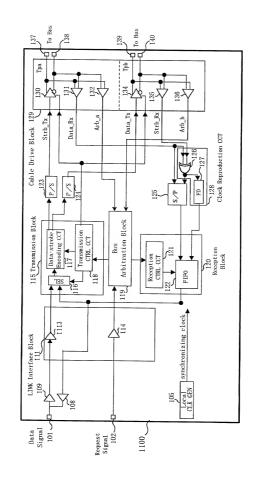


Fig. 8

arbitration transmit		
Arb_a_TX	Arb_b_TX	State of FIFO
Z	Z	Inactive
Z	0	Inactive
Z	1	Inactive
0	Z	Inactive
		Inactive
0	o	Inactive
		Inactive
0	11	Inactive
11	Z	Inactive
11	0	Active
1	1	Inactive

Fig. 9

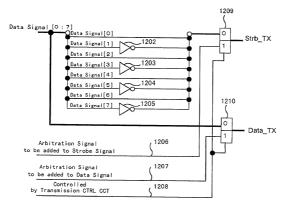


Fig. 10

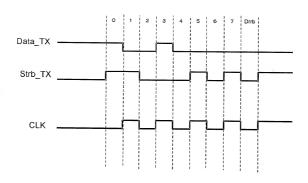


Fig. 11

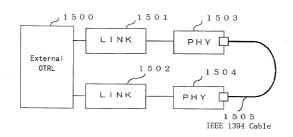


Fig. 12

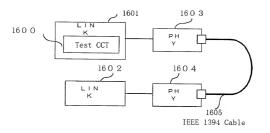
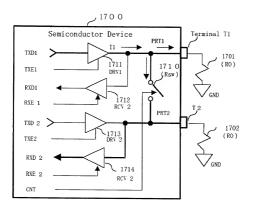


Fig. 13



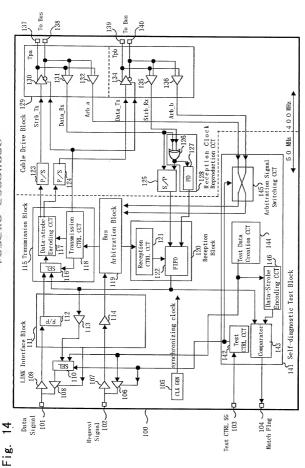
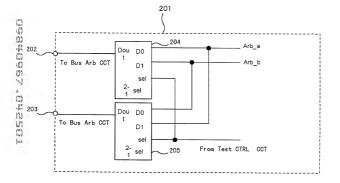
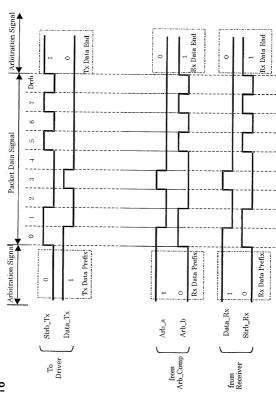


Fig. 15





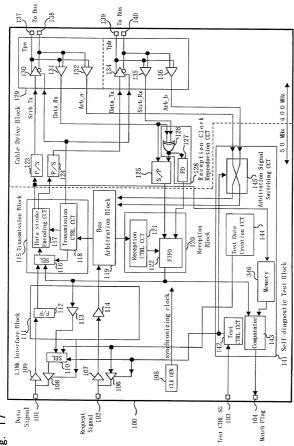


Fig. 18

